

Sub D3
17. The method of claim 15, wherein the covalently linked molecule is biotin and the ligand is avidin.

A3 cancelled
18. The method of claim 15, wherein the biologically active molecule is a nucleic acid, the ligand is PEI conjugated to avidin and the surface receptor is biotin. --

Please cancel claim 6 ✓ without prejudice.

REMARKS

Claims 1-5 and 7-18 are pending after the cancellation of Claim 6 and addition of Claims 15-18. Claims 1 and 7 are amended herein for clarity to more particularly define the invention. Further, Claim 7 has been amended to depend from Claim 1. Newly added Claims 15-18 recite further embodiments of the invention disclosed in the specification. Applicants submit that no new matter has been added by these amendments or additional claims. Support for these amendments and additional claims can be found throughout the specification, as set forth below. In light of these amendments, additional claims and the following remarks, Applicants respectfully request reconsideration of this application and allowance of both the pending and new claims to issue.

I. Rejection under 35 U.S.C. § 112, second paragraph

Claims 1-3 and 6-7 are rejected under 35 U.S.C. § 112, second paragraph, as allegedly not

particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. Specifically, the Office Action states that pending Claim 1 and now cancelled Claim 6 are incomplete for omitting essential steps, such omission being characterized as a gap between the steps. The steps which are allegedly omitted are: any step of actual transduction of the biologically active molecule or nucleic acid into the interior of the cell. The cancellation of Claim 6 has mooted this rejection as to that claim.

Applicants submit that Claims 1-3 and 7 do not omit any essential steps. Applicants have defined the steps that must be taken by the skilled practitioner of the art to accomplish the claimed method. The step cited by the Examiner as having been omitted, the step of transduction, is the result of a biological mechanism that takes place once the steps recited in the claims have been carried out. That is, once a molecule that can act as a surface receptor has been covalently linked to the cell surface, a biologically active molecule has been complexed with a ligand for the surface receptor, and the biologically active molecule-ligand complex has been contacted with the cell surface, the transduction of the molecule will occur. Thus, it is not a step to be taken by the practitioner, but is the result of the steps taken. Therefore, it need not be recited as a step. Nevertheless, for the sake of greater clarity, Applicants have amended Claim 1 to state the conclusion of the method and have amended Claim 7 so as to depend from Claim 1. Applicants submit that Claims 1-3 and 7 do not omit any essential steps and therefore fulfill the requirements of 35 U.S.C. § 112, second paragraph. Applicants therefore request that this basis of rejection be removed for Claims 1-3 and 7.

II. Rejection under 35 U.S.C. § 102(b)

Claims 6 and 9-10 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Zanta et al., Baker et al. or Al-Hakim et al. Specifically, the Office Action states that Claim 6 is anticipated by Zanta et al. or Baker et al. Applicants have cancelled Claim 6, and made Claim 7 depend from Claim 1.

The Office Action states that Claims 9 and 10 are anticipated by Al-Hakim et al. Al-Hakim et al. discloses the construction and use of non-radioactive probes which comprise an adduct of a basic macromolecule and biotin in which the macromolecule can be PEI and in which the adduct can be cross-linked to a nucleic acid to form a non-radioactive nucleic acid hybridization probe. Claim 9 recites “a composition comprising a nucleic acid-polyethyleneimine-avidin complex.” In contrast, Al-Hakim does not disclose any complex comprising avidin, and more specifically, Al-Hakim does not disclose a PEI-avidin adduct. Therefore Al-Hakim does not anticipate the invention as recited in Claims 9 or 10. Applicants request that this basis for rejection be withdrawn.

III. New Claims

Claims 15-18 are added to recite the method of delivering a biologically active molecule to the surface of a cell. Applicants submit that these claims are supported by Claim 1 as originally filed, and throughout the specification, as any biologically active molecule that is delivered into a cell after contacting the cell surface, has been delivered to the cell prior to the step of transduction into the interior of the cell. Therefore, Applicants submit that no new matter has been added.

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Applicants further submit that independent Claim 15 and dependent Claims 16-18 are free from the prior art for the reasons indicated for Claims 1-3 and 7. Entry of these new claims is believed merited and is respectfully requested.

Pursuant to the above amendments and remarks, consideration and allowance of the pending application is believed warranted. The Examiner is invited and encouraged to directly contact the undersigned if such contact may enhance the efficient prosecution of this application to issue.

A check in the amount of \$80.00 is enclosed to cover the claim fee for an additional independent claim. No additional fees are believed to be warranted; however, the Commissioner is hereby authorized to charge any fees which may be required to Deposit Account No. 14-062.

Respectfully submitted,

NEEDLE & ROSENBERG, P.C.

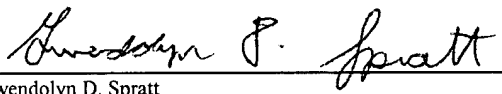


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I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on the date shown below.


Gwendolyn D. Spratt

02-07-01
Date